

*The date of the volume is given as 1880, however the Author indicates the date as 1881 in a footnote page not numbered of a reprint Aggiunta Agli Afidi Di Sardegna originally printed in *Bullettino della Società Entomologica Italiana*, Anno XIV, pp 243-249, 1882.

Martelli, Minos.

Contributi Alla Conoscenza Dell'Entomofauna Del Granoturco. Redia, Vol. XXXV, 1950, p 281.

TWO NEW SPECIES OF *LACHNINI* (APHIDIDAE) FROM COLORADO

F. C. HOTTES

Grand Junction, Colorado

In 1951 the writer and Dr. L. P. Wehrle published a paper, "Two New Species of *Lachnini* (Aphididae) from Arizona." Quite by coincidence the species published as new here, are closely allied to the two species described from Arizona.

SCHIZOLACHNUS **WAHLEA** HOTTES, new species

APTEROUS VIVIPAROUS FEMALE.

Size and general color. — Length from vertex to tip of anal plate varying from 2.43-2.86 mm. Head and thorax black. Head made more or less gray by white powder. Prothorax with a broad "T" shaped powdered area. Mesothorax and metathorax almost free from powder except laterally and the posterior region of the metathorax which is provided with a transverse band. Abdomen either light brown or green alternately banded with narrow transverse rows of powder, there being about seven such rows. The rows are not confined to the dorsum, but continue on the ventral surface where they are almost complete. Immature specimens are free from powder, and are either black or greenish-black. Antennal segments dusky brown, with the first and last segments darkest. All femora except extreme base dark brown to almost black. Prothoracic and mesothoracic tibiae brown, with apical portions and tarsi darker. Metathoracic tibiae uniform dark brownish-black, tarsi the same.

Head and thorax. — Width of head through the eyes .48 mm. Head with a median suture. Rostrum typical of genus, attaining metathoracic coxae, in most cases; always surpassing coxae of mesothorax. Antennal segments with the following proportional

lengths: III .39-.45 mm., IV .17-.21 mm., V .14-.17 mm., as a rule always shorter than V, but in a few cases IV and V are equal. VI .07-.11 + .03-.04 mm. There are no secondary sensoria. Antennal hair rather sparse, coarse, that on III just short of being two times as long as width of segment. Prothorax with small lateral tubercles. Femora of prothorax and mesothorax broad and rather heavy, apical hair on these segments somewhat thicker than remaining. Metathoracic femora .71-2.00 mm.

These femora are much broader apically than they are near the base, and in most cases appear to be more or less deformed. Hair of the ventral surface of the hind femora thick, short, peg-like. The pegs being unequal in length, remaining hair of equal coarseness, but longer and sharp pointed. Metathoracic tibiae 2.71-3.07 mm. long, with coarse dull pointed hair, which are shorter than width of tibiae. Hind tarsi .40-.42 mm. long. First segment of hind tarsis with a few long much inclined hair. Apex of tibiae on inner side with a few fine short hair.

Abdomen.—Cornicles dusky brown, base of cornicles .07-.10 mm. with about three hair. Dorsum with about seven transverse rows of hair. Cauda and anal plate with long fine hair on outer margins, inner portions with much shorter and finer hair. Cauda more or less pointed.

OVIPAROUS FEMALE.

Unless otherwise noted as in apterous viviparous female. Length 2.21-2.50 mm. Comparative lengths of antennal segments as follows: III .37-.42 mm., IV .17-.18 mm., V .14-.16 mm., VI .07-.1 + .03-.04 mm. Hind femora 1.57-1.64 mm. Hind tibiae 2.07-2.50 mm. The hind tibiae are somewhat swollen beyond their middle, the sensoria are tuberculate but have an atypical appearance.

This species is extremely limited in nature. I have not taken it except by "beating." Observations made indoors indicate that it is a needle feeder, but it has not been observed feeding in nature. For some reason I have not been able to take males, and apparently I located it too late for alate viviparous females.

The fact that both this species and *S. tusoca* H. & W. have peg-like hair on the hind femora indicates that these species have a close affinity. Lacking specific information to the contrary, and after having again examined the type of *tusoca* I believe them to be distinct. They two species differ as follows: *S. Wahlea* is larger, has longer antennae, segments IV and V of the antennae differ in relative

length, the rostrum is much longer, the cornicles have a wider base, the metathoracic femora and tibiae are much longer, the hair on the upper surface of the hind femora are of the same quality as the pegs.

Holotype apterous viviparous female Aug. 17, 1952. Morphotype apterous oviparous female Oct. 6, 1952. Both types deposited in the United States National Museum. Host *Pinus ponderosa* (Needles?) Carson Hole, South of Whitewater, Colorado.

CINARA WAHLUCA HOTTES, new species

APTEROUS VIVIPAROUS FEMALE.

Size and general color.—Length from vertex to tip of anal plate varying from 2.72-3.00 mm. Color of head thorax and abdomen reddish-brown, with the head somewhat lighter. Specimens collected just before the appearance of the oviparous females darker than specimens taken in August. Free from all pulverulence, but not shining. Thorax and abdomen with a pale yellowish-orange median line. Median line with two and sometimes three rows of brownish spots or punctures on each side. Cornicles darker than abdomen, very dark brownish-black, but not black. Apical portions of antennal segments three, four, five and six darker than remaining portions, segment three less dark than the others. Last three segments of the rostrum dark brown, remaining portion of rostrum more or less spotted. Cleared specimens show the head brownish and pigmented spots on the thorax and fore part of the abdomen, these do not show in life. There are two rather narrow transverse spots of a pigmented nature on the dorsum of the abdomen just anterior to the cauda. Cauda and anal plate dusky. Spiracles arising from small pigmented areas. Hind femora with apical halves dusky, remaining portion of femora pale. Hind tibiae with small portion near base and apical half dusky. Tarsi dusky.

Head and thorax.—Head with a median suture which is not deeply pigmented. On either side of this suture there is a row of long hair, lateral to these hair there is an area rather free from hair. Width of head across eyes .61 mm. Ocular tubercles well developed. Antennal segments with the following proportional lengths: III .28-.32 mm., IV .16 mm., V .17-.21 mm., VI .08-.1 + .04 mm. There are one to two secondary sensoria on segment five. Antennal hair not numerous, but long, and quite upright, that on segment three almost three times as long as width of segment. Rostum long, reaching about to mid region of abdomen. Hind tibiae

1.28 mm. long. Hair on hind tibiae upstanding, that on outer surface longer and more upstanding than that on inner. Ratio of length of hair to width of tibiae 17-12. Hind tarsi .29 mm. long, first segment with about twelve hair. Hair on inner surface of hind tibiae near apex more numerous than that on outside, also shorter and finer.

Abdomen.—Cornicles with outer margin of base very irregular, width of cornicles at base about .21 mm. Cornicles with two to three rows of hair, the third row very irregular and depending upon base being present. Cauda and anal plate with long hair. Pigmented spots anterior to cauda with one to two rows of long hair. Dorsum of abdomen with many long fine hair.

OVIPAROUS FEMALE

Length varying from 2.28-2.66 mm. Color essentially the same as that of viviparous female, and free from powder. Specimens taken late in the season are inclined to be darker and to have the lateral and dorsal spots surrounded with areas tinged with green. Comparative lengths of antennal segments as follows: III .33-.40 mm., IV .13-.17 mm., V .20-.22 mm., VI .1-.11 + .02-.05 mm. There is one secondary sensorium on segment five. Hind tibiae .97-1.07 mm. long. Hind tarsi .21-.24 mm. long. Sensoria on hind tibiae indistinct, few if any breaking to the surface.

APTEROUS MALE.

Length varying from 1.72-2.07 mm. Specimens of this sex were not noted in life, color of head apparently brown, thorax with pigmented areas of brown, abdomen yellowish-brown. Antennal segments and legs quite dark. Comparative lengths of antennal segments as follows: III .28-.32 mm., IV .14-.15 mm., V .17-.21 mm., VI .08-.1 + .05 mm. Segment four of antennae with five to six secondary sensoria, segment five with three to five secondary sensoria. The secondary sensoria are irregular in size, and are as a rule rather small except for one of normal size on each segment. There is a tendency for the secondary sensoria to cluster.

Hind tibiae .97-1.07 mm. long. Hind tarsi .21-.24 mm. The rostrum reaches almost to the cornicles. Width of cornicles at base .07-.11 mm. with one row of hair, and a partial second. Gonapophyses curved, rather pointed, with fine short hair at the tip.

This species is easily overlooked, I took it first by "beating." I have found it on only two trees. It is a bark feeder, showing a preference for the trunk and larger limbs where it lives concealed under partially free scales. I have also located it in cracks, and in

regions where the bark has been injured. Its color is such that it blends in well with the red color of the under bark. It is closely allied with *C. tonaluca* H. & W. from which it differs in size, in length of antennae, over all length of rostrum, and length of last three segments of rostrum, length of hind tibiae, wider cornicles, length of hair on antennae and tibiae, and by the median line not being black. It also differs by not having powder.

Holotype apterous viviparous female Aug. 17, 1952. Morphotype oviparous female Sept. 12, 1952. Allotype apterous male Sept. 22, 1952. All types deposited in the United States National Museum. All specimens collected on *Juniperus scopulorum*, located in a small area on Pinon Mesa, south of Glade Park, Colorado.

CINARA TONALUCA H. & W.

The description of *C. tonaluca* was not written till after the death of Dr. Wehrle. Mrs. Wehrle has since provided me with notes made by Dr. Wehrle from which I quote. "On woody stem of young tree, wingless adults covered with white waxy bloom on upper and under sides of body. Black longitudinal dorsal mid line shows through wax, as do two rows of black punctures on each side of line. Cornicles show through wax as circular black spots."